



Director of
Central
Intelligence

~~Secret~~

(b) (1)
(b) (3)

Sub-Saharan Africa's Worsening AIDS Crisis (C)

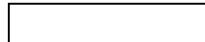
Special National Intelligence Estimate

*This Special National Intelligence Estimate represents
the views of the Director of Central Intelligence
with the advice and assistance of the
US Intelligence Community.*

0046021
SNIE*70*90
NI*0038*90

0434-0434

DDI REGISTRY
ODDI STAFF & NIC DISSEMINATION


HVS

APPROVED FOR RELEASE
DATE: OCT 2005

~~Secret~~

SNIE 70-90
August 1990

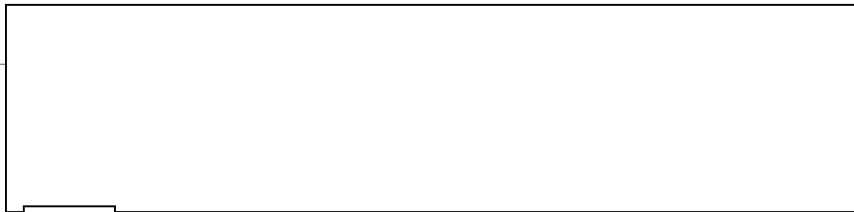
Copy 434



**National Security
Information**

**Unauthorized Disclosure
Subject to Criminal Sanctions**

**Dissemination Control
Abbreviations**



This information has been authorized for release to...

Intelligence sources or methods involved

A microfiche copy of this document is available from OIR/



All material on this page
is Unclassified.



SNIE 70-90

Sub-Saharan Africa's Worsening AIDS Crisis

*Information available as of 16 August 1990 was used
in the preparation of this Special National Intelligence Estimate.*

*The following intelligence organizations participated
in the preparation of this Estimate:*

The Central Intelligence Agency
The Defense Intelligence Agency
The National Security Agency
The Bureau of Intelligence and Research,
Department of State

also participating:

The Deputy Chief of Staff for Intelligence,
Department of the Army
The Director of Naval Intelligence,
Department of the Navy

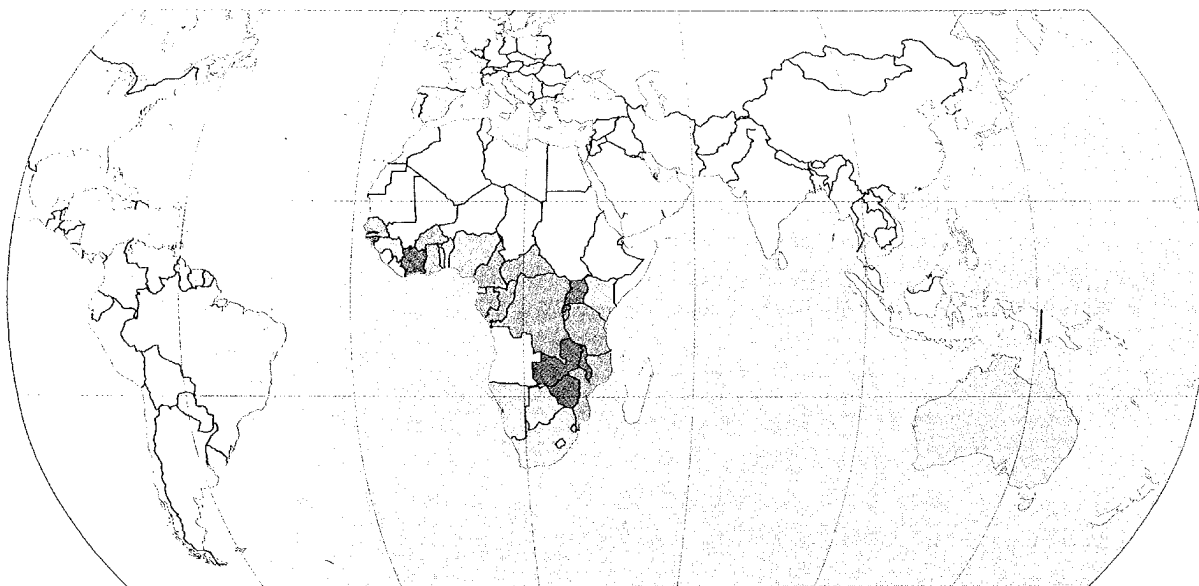
*This Estimate was approved for publication by the
National Foreign Intelligence Board.*

Sub-Saharan Africa's Worsening AIDS Crisis

- Short of a cure or a vaccine, which are unlikely by the mid-1990s, there appears to be little opportunity to slow the African AIDS epidemic. It engulfs all countries of Sub-Saharan Africa and is spreading at such an alarming rate that we expect 20-30 million Africans will be infected by the mid-1990s.
- The economic and social consequences for countries that lose significant portions of their urban adult populations to AIDS will be debilitating. In some countries, economic productivity will probably be on a downturn by 1995, and severe stress on the extended family network will be evident.

-
- Growing international concern with the epidemic may complicate Western ties to Africa. Africans will expect the United States and the West to provide increased assistance to cope with the disease, and failure to do so may result in harsh criticism and charges of racism.

Figure 1
Global Human Immunodeficiency Virus (HIV) Estimates: Rates of Infection per 100,000 Persons



Boundary representation is not necessarily authoritative.

Greater than 5,000	
Guinea-Bissau	6,500
Ivory Coast	6,089
Malawi	6,000
Nigeria	5,001
Uganda	5,880
Zambia	5,595
Zimbabwe	2,906

Senegal	1,000
Tanzania	2,976
Trin. & Tob.	1,043
Turks & Caicos Is.	1,679
Zaire	1,184

Colombia	200-500
Denmark	230
Dominica	239
France	374
Grenada	450
Guinea	400
Guyana	251
Italy	261
Monaco	411
Montserrat	331
Namibia	453
Neth. Antilles	285
Panama	400
Qatar	209
South Africa	208
Spain	269
St. Lucia	227
St. Vin. and Gren.	477
Suriname	239
Switzerland	455
Uruguay	485
Venezuela	260
United States	413

1,000 to 5,000	
Anguilla	1,168
Bahamas, The	3,536
Bermuda	4,636
Burkina	3,000
Burundi	1,122
Cameroon	1,001
Central Af. Rep.	4,000
Congo	4,600
Dom. Republic	1,126
French Guiana	3,168
Gabon	1,200
Ghana	3,000
Guadeloupe	1,066
Haiti	1,591
Mozambique	3,300

500 to 1,000	
Barbados	945
Djibouti	532
Gambia, The	751
Honduras	784
Kenya	556
Martinique	754
Nigeria	500
St. Kitts & Nevis	898
Swaziland	690

200 to 500	
Australia	222
Belize	349
Benin	322
Botswana	231
Brazil	332
Cayman Islands	421

Less than 200	
All other countries	

Key Judgments

Short of a cure or vaccine, which are unlikely by the mid-1990s, there appears to be little opportunity to slow the African AIDS epidemic. Africans are not changing sexual behavior patterns enough to affect the course of the disease, even though most know more about AIDS/HIV (human immunodeficiency virus) transmission as a result of education campaigns. ☐

The epidemic engulfs all countries of Sub-Saharan Africa and is spreading at an alarming rate through the central and southern regions. We estimate that between 6 and 8 million Africans are already infected, a figure we expect to increase to 20-30 million by the mid-1990s. The combination of AIDS with the myriad of natural and manmade adversities could fundamentally change African societies and their relationships with others during this decade. Humanitarian and health issues will become increasingly important to international and regional leaders struggling to save future generations from illness and premature death. ☐

African Response

All African countries participate in the anti-AIDS program of the World Health Organization (WHO) and eagerly accept bilateral aid; nevertheless, few African political leaders now put the full force of government into the fight and fewer still share the medical professionals' sense of urgency. The relatively low political priority accorded the crisis has meant that the creation of national AIDS committees and the startup of education campaigns has been excessively bureaucratic and only slowly implemented, even though external funding has been generous. In South Africa, for instance, only when a 1-percent infection rate was found among the adult black population did the government appeal for international assistance in slowing the epidemic. ☐

Increasing illness and death among elites during the early 1990s may prompt more aggressive action, but, in view of hard economic times and a lack of resources, frustrated leaders are likely to seek scapegoats among unpopular ethnic or regional groups or blame the West for inadequate assistance. Costs of upgrading health systems to even minimal standards, however, are beyond the reach of stretched assistance budgets of Western donors. ☐

Consequences

The economic and social consequences for countries that lose significant portions of their urban adult populations to AIDS will be debilitating. Infection rates in African cities range between 1 and 18 percent or more, and are rising. Of particular importance for future stability will be the depletion of the small number of political, military, and economic elites, of whom a disproportionate share are prone to high-risk sexual behavior. Unless Africans overcome cultural antipathies to the only means of prevention currently available—abstinence from casual sexual encounters and condom use—the resources of governments and economies will be sapped:

- Although we cannot as yet document AIDS-induced economic change, we believe that the first indicator will be a reduction in the size of some labor forces because of increased morbidity and mortality. Preliminary results from an epidemiological-demographic model suggest that such declines in the working-age population will be noticeable by 1995 in for instance. But given data shortcomings, we can only speculate that after 1995 workers will be younger, less experienced, and less well trained and that productivity will probably be on a downturn. ~~(S)~~

The rising incidence of infection among children and mothers is setting the stage for a new set of problems, including severe stress on the extended family network in some countries. International health officials predict conservatively that by 1992 some 200,000 African children will have AIDS or be infected. African governments rely on the extended family to care for orphans, sick and dying AIDS patients, and the elderly whose adult children succumb to the disease. But many families are too poor to assume these multiple burdens, and, coupled with the fear and prejudice still surrounding the disease, many victims are shunned by family, expelled by villagers, and left to fend for themselves. ~~(S)~~

The disease has made inroads into rural areas, and it is probable, although undocumented, that current low HIV infection rates there are increasing. Much of the increase is fueled by urban migrants who, during returns to the countryside, infect rural residents. There are high rates of infection in populations along major transportation routes, because of transmission from truckdrivers and the prostitutes who haunt the truckstops. Regions beset by warfare are particularly at risk. ~~(S)~~

Data Shortcomings

Despite an increase in information on AIDS in Sub-Saharan Africa over the last several years, data remain fragmented, inconsistent, and, in many cases, unreliable. Health care systems remain both rudimentary and inaccessible to the majority of people. Diagnostic ability in most countries is still inadequate, survey taking to assess behavioral change has just begun, and some governments remain defensive and unwilling to release data that do become available. Modest improvements in testing and information collection, however, have enabled some refinement of infection and disease estimates and allowed preliminary projections of the potential spread of AIDS. We believe that further improvements in data collection will probably reveal a crisis of even greater magnitude than is portrayed in this Estimate.

High prevalence of other endemic diseases, and a limitless demand for AIDS care and control programs will overwhelm already weak health systems. The cost of upgrading health systems will probably be prohibitive for governments as well as for foreign donors who foot much of the bill even now.

External Involvement

The USSR, Eastern Europe, and Cuba will probably play minor roles in Africa's anti-AIDS campaigns. The Soviet Union's AIDS disinformation campaign has wound down under pressures from the United States and its own desire to be seen as more cooperative internationally. East European countries will most likely remain preoccupied with internal changes and newly recognized AIDS epidemics within their own borders. Although Cuban doctors and technicians are acceptable to African countries, no African government has been willing to embark on a policy of lifelong quarantine of infected persons similar to that in Cuba. Requirements denying entry to infected African students are likely to remain in effect as they have not disrupted bilateral relationships between Africa and Communist countries.

Growing international concern with the epidemic may complicate Western ties to Africa. Africans will expect the United States and the West to provide greatly increased assistance to cope with the disease. African disappointment may result in harsh criticism and charges of racism. The withdrawal of Western business assets or investments because of AIDS would add to tensions and African frustrations. Finally, ethical questions raised by any drug or vaccine testing on African populations by Western researchers may also strain relations.

Contents

	<i>Page</i>
Key Judgments	v
Discussion	1
Retrospective	1
A Worsening Epidemic	1
Geographic Scope	1
AIDS Among Selected Population Groups	4
Education and Prevention Campaigns	7
Health Infrastructures	8
Cultural Changes	8
Outlook for the 1990s	12
External Involvement	16
The USSR, Eastern Europe, and Cuba	16
The United States and the West	16
Annex: Country Profiles	19

(Page 8 blank)

The AIDS Virus in Africa

Origins. The origins of the viruses that cause AIDS remain a matter of probably unprovable hypotheses. Those who propose African origins of the AIDS epidemic presume that a mutant variant of one or more of simian retroviruses was accidentally passed to humans, where it underwent further spontaneous adaption before emerging as Human Immunodeficiency Virus (HIV). A more recent hypothesis is that human retroviruses have long existed and may have mutated repeatedly, eventually emerging as HIV. In any case, Africans remain extremely resentful of any implication that they were responsible for the emergence of AIDS as a global disease. (U)

Virus Variants. HIV is highly mutable. HIV-1, the first virus recognized in the epidemic, has been found in retrospective examination of samples from both the United States and Africa that had been collected and preserved in the 1950s. A second major variant, HIV-2, was recognized in West Africa in 1986. It is also prevalent in Angola and Mozambique. Other variants may emerge in Africa during the span covered by this Estimate, but so far none have been recognized. The ability of HIV-2 to produce human disease seems similar to HIV-1, but further study will be needed to determine if there are major differences in the incubation period or lethality of the two strains. (U)

Modes of Transmission. Heterosexual and perinatal transmission dominate the African epidemic. No matter how effective preventive education and condoms may come to be, the number of persons already infected will result in rapidly rising numbers of deaths of adults and children for the next decade. (U)

The rate of infection through blood or blood products is falling as the technology for screening blood has been successfully exported to Africa. Blood-borne transmission will be significantly curtailed in the coming decade provided the external assistance for screening continues to be available. Homosexual transmission and transmission by needles shared for drug abuse are probably of minimal significance in the African epidemic, except among whites in South Africa. (U)

Cofactors. Probably there are multiple cofactors that either facilitate infection or accelerate the progression to AIDS. Especially significant in Africa are other sexually transmitted diseases (STD), particularly those that cause ulceration of skin or genital mucosal surfaces. Also, men who are uncircumcised have greater risk of infection than those who are circumcised. (U)

Discussion¹

Retrospective

SNIE 70/1-87, *Sub-Saharan Africa: Implications of the AIDS Pandemic*, published in June 1987, properly warned of the spread of AIDS to all Sub-Saharan countries and correctly called attention to an intensifying urban epidemic that puts a disproportionate number of Africans in the modern sector, including the military, at high risk. The Estimate also correctly warned of the possibility of increasing AIDS in rural areas, especially along major transportation routes, a rise in AIDS cases among mothers and infants, and of the inability of the health systems to cope with large numbers of the terminally ill. ☐

The Estimate underestimated the degree of acceptance by most African countries of internationally backed campaigns for public education efforts to change high-risk sexual behavior. It overestimated a backlash against the West, East European countries, and the USSR resulting from mandatory testing and expulsion of HIV-infected civilian and military students, as well as a backlash against African governments' inability to combat the disease. On the other hand, although few of the adverse economic and political trends forecast have occurred, it is probably too early in the course of the epidemic to measure such effects. ☐

Despite an increase in information since 1987, the scope and intensity of the epidemic are still difficult to precisely assess because data remain fragmented, inconsistent, and unreliable. The vast majority of Africans do not come under the care of public health systems, diagnostic ability in most countries is still inadequate, survey taking to assess behavioral change has just begun, and some governments remain defensive and unwilling to release data that do become available. Nevertheless, some modest improvements in testing and information collection over the past

three years have enabled some refinement of infection and disease estimates and allowed preliminary projections of the potential spread of the epidemic.² (U)

A Worsening Epidemic

A rapid increase in reported AIDS and HIV carriers since 1987 is undisputed. The World Health Organization (WHO) estimates that by mid-1990 at least 4-6 million Sub-Saharan Africans (one of every 50 adult men and women) were infected, more than half the global total. Our own estimate is even higher—between 6 and 8 million Africans infected, a figure we expect to increase to 20-30 million by the mid-1990s. The epidemic still is predominantly urban (about 30 percent of Sub-Saharan Africa's 540 million people are urban) and hits hardest among the economically productive 15 to 50 age group. Although infection rates are usually lower in rural Africa, the epidemic is beginning to make inroads there as well, and, because so many women carry the virus, the number of infants born infected is rising. ☐

Geographic Scope

The epidemic is spreading unabated throughout central, southern, and eastern Africa. HIV infection rates are sure to rise in most countries during the 1990s. Virtually all of those now infected will develop the clinical symptoms of AIDS and die within five to 10 years and will be capable of infecting others. Although infection rates are rising almost everywhere, they are particularly high in certain countries and cities:

- On the basis of 1989 surveys, 7 to 8 percent of the population of Bangui, Central African Republic, were estimated to be infected, as many as 50,000 people. Smaller towns in the north and east are experiencing rates nearly as high.

¹ This Estimate was initiated by the National Intelligence Officer for Africa in light of growing concern about the AIDS epidemic in Africa. It estimates the scope and impact of the disease through the mid-1990s. ☐

² See annex for details and a discussion of data sources and shortcomings. (U)

Figure 2
Human Immunodeficiency Virus (HIV)
Concentrations in Sub-Saharan Africa as of July 1990

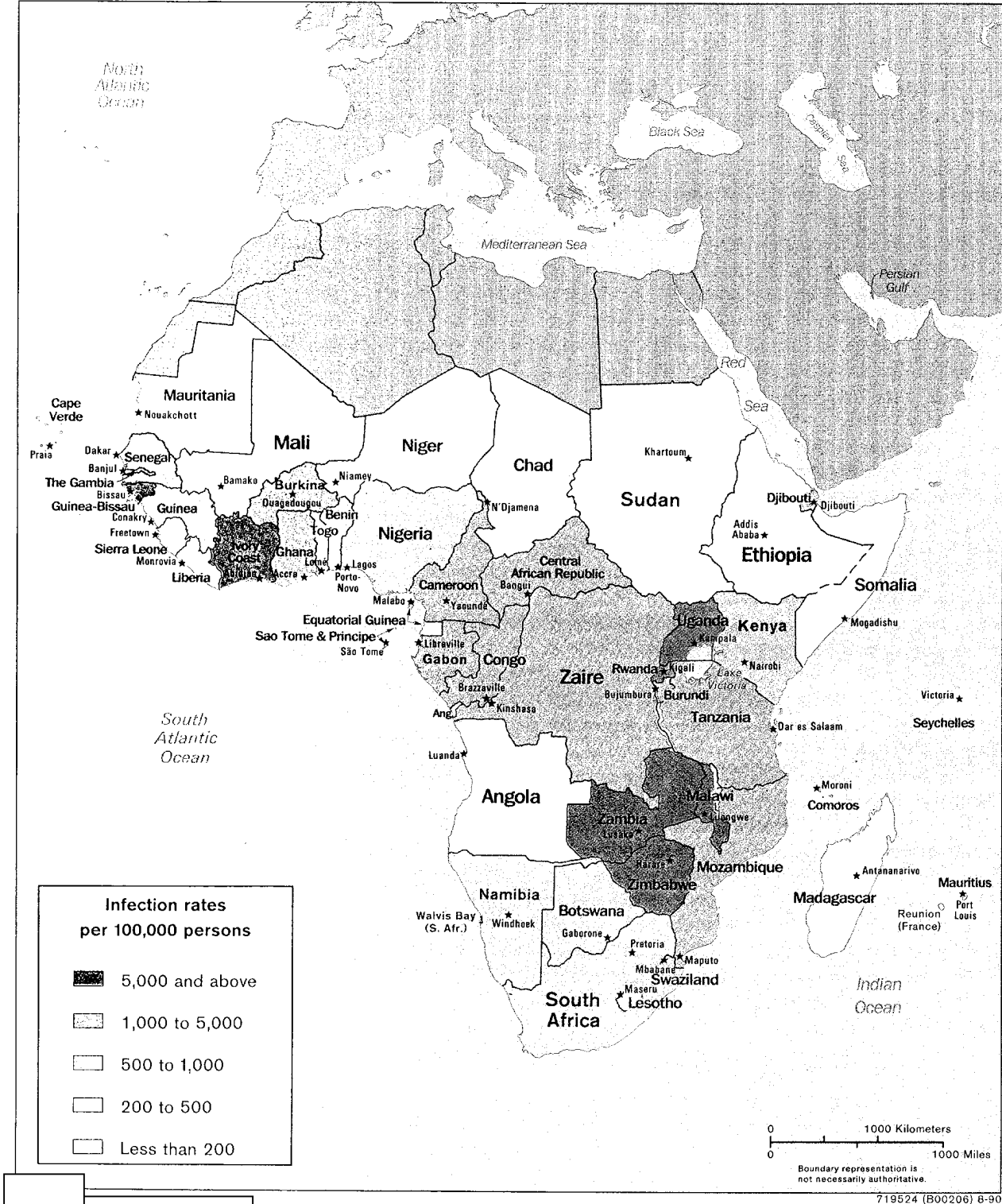
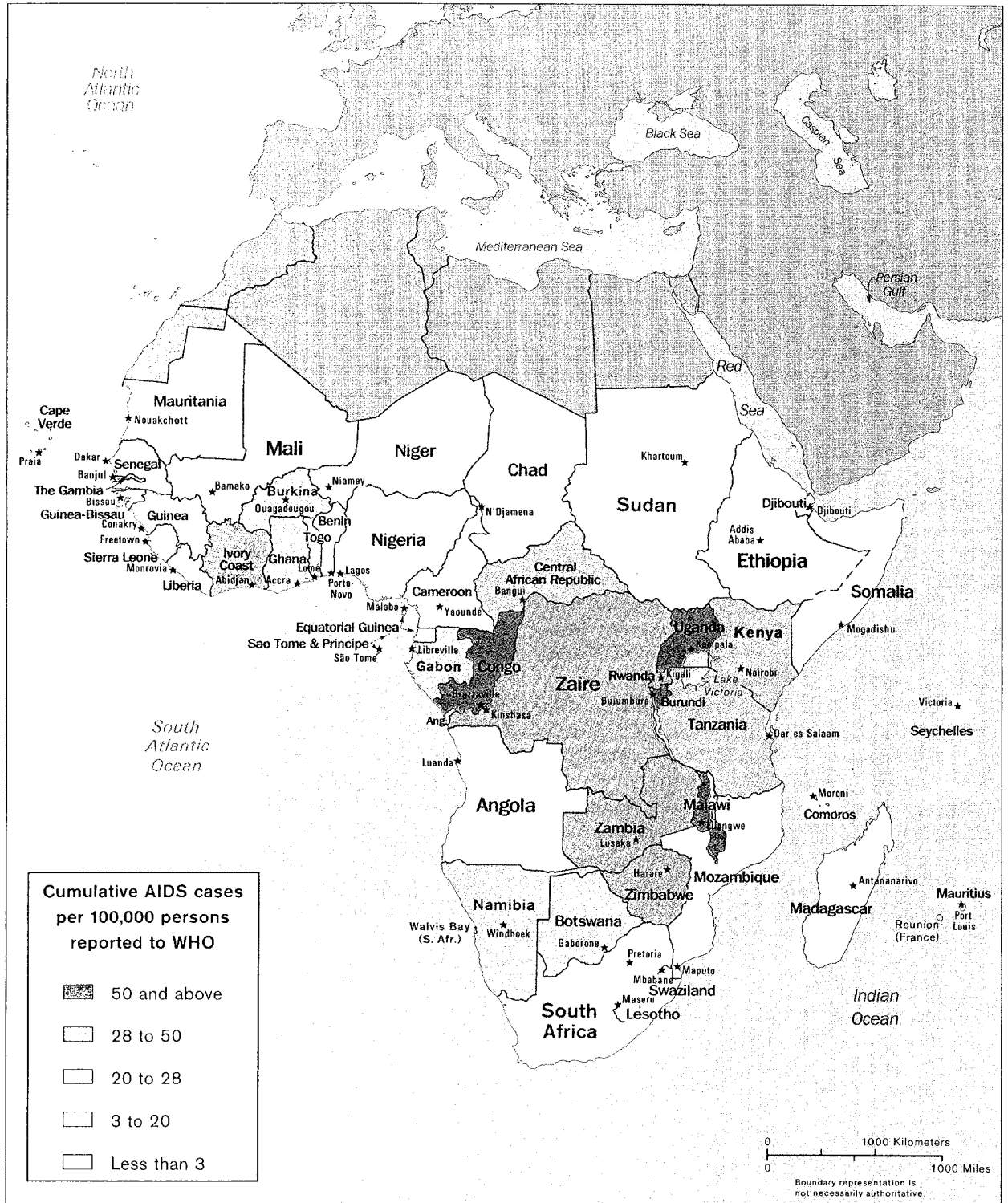


Figure 3
Cumulative AIDS Cases in Sub-Saharan Africa as of July 1990



Unclassified

719525 (B00206) 8-90

- Hospital officials in Rwanda estimated that the number of infected people in the country nearly doubled in four years, up to 30 percent of 18- to 45-year-olds in Kigali were infected, and rural rates were between 2 and 3 percent and increasing.
- Survey results show 4 to 6 percent of the Kinshasa, Zaire, population are infected.
- In Uganda, a 1988 survey showed urban infection rates of 21 percent in the central region and 17 percent in Kampala. On the basis of the survey, 765,300 adults and 25,500 children are estimated to be infected in 1990.
- Researchers estimate that 10 to 15 percent of Zambia's adult population are infected, and 10 percent in Zimbabwe.

As few as three years ago, West African countries had hoped to escape a severe epidemic, but by early 1990 the disease was recognized as a threat to them as well. Infection rates in a few countries, such as Ivory Coast and Guinea-Bissau, approximate those elsewhere in Africa:

- In Ivory Coast, excluding Abidjan, surveys showed infection rates of 7.3 percent in urban and 5 percent in rural areas, implying 400,000 persons infected countrywide. A 1988 survey in two Abidjan hospitals revealed 43- and 28-percent infection rates among patients.
- WHO estimates infection rates in Guinea-Bissau of 7 to 10 percent.
- Other countries have lower rates: Gambia at 1.7 percent, doubling yearly since 1986; Ghana, with 1.1 to 5 percent; and 2 percent of the urban adult population in Mali.

Because a major variant of the AIDS virus—HIV-2—causes much of the disease in West Africa, however, the course of the epidemic there may differ from that in other parts of the continent.

AIDS Among Selected Population Groups

Rural-Urban Differences. Data show urban infection rates higher than rural in nearly every country.

Rather than rural people being somehow at lower risk, the spread of the disease there may simply be several years behind the cities, or poor documentation of rural prevalence may be hiding the extent of disease. A lack of medical care, personnel, and health resources in the countryside prevents a widespread ability to diagnose AIDS or test for HIV, and few rural populations have been systematically screened to determine the levels of infection. In Uganda's 1988 survey, the only countrywide study to include both urban and rural HIV screening to date, rural rates range between 7 and 12 percent—lower than urban rates, but still very high. (U)

Some researchers suggest that traditional mores in rural communities limit casual sexual activity and hold HIV transmission in check. This hypothesis is supported by a study of a few rural Zairian communities where infection rates have been 1 percent or less for 10 years. It is questionable, however, whether these limited findings should be extrapolated to apply to the whole of rural Zaire or to any other country's rural population. (U)

War and civil unrest increase the disease risk for some rural populations. Hard hit by such turmoil and now suffering an intense AIDS epidemic are the civilians living on the western shore of Lake Victoria in Uganda and in the northern border villages of Tanzania, the route of the 1979 Tanzanian incursion in Uganda. (U)

Rapid urbanization and urban lifestyle factors are at least partially responsible for high urban infection rates. Urbanization in Sub-Saharan Africa has increased from 12 percent in 1950 to an estimated 30 percent in 1989. Most African cities have demographically unbalanced populations because of the preponderance of males in migration flows. Researchers have shown a relationship between sex ratios and high

infection rates: the higher the ratio of men to women, the more likely there will be a large commercial sex trade, an increase in high-risk sexual behavior on the part of young males, and rapidly rising levels of sexually transmitted diseases and AIDS. Such a population imbalance is one factor likely to accelerate epidemics in Abidjan and Nairobi. (U)


Infected urban migrants who return to rural homes may hasten the spread of the virus among rural populations, but AIDS control officials are more concerned with the high-risk behavior of truckers and prostitutes in small trading centers along major roads through the countryside. In 1987, surveys showed 33 percent of the truckers on the Uganda-Kenya route were infected and nearly 86 percent of prostitutes at truckstops were infected. More recent surveys found that, at the first stop in Zimbabwe on the route to Zambia, all of the 100 prostitutes were infected, as were 35 percent of drivers operating between Zambia and South Africa. Truckers in Niger, Uganda, Tanzania, South Africa, Nigeria, Malawi, Ethiopia, and many other countries have been targeted for prevention campaigns and some, such as the truckers union in Niger, have requested prevention programs. ☐


Elites. Although data vary from study to study, urban-based economic and political elites seem to be infected at levels at least as high as the general urban population or higher if they indulge in high-risk sexual behavior made possible by their privileged positions and better salaries. Anecdotal evidence reveals AIDS deaths of government officials and high-ranking military personnel in many countries and some small surveys indicate a growing HIV epidemic among the skilled work force and upper-income groups:

- Forty percent of health workers in a Bissau obstetric clinic were found to be infected.
- Numerous military students have been expelled from other Third World countries, the West, the USSR, and Eastern Europe when found infected.

Militaries. African security forces are at particularly high risk because most of them are stationed in urban areas and high-risk sexual behavior is common. Many soldiers are far from their families and seek—and can afford—casual sexual partners. Insurgent groups in Africa are also vulnerable; particularly in southern Africa, guerrilla organizations have initiated anti-AIDS education programs. Information on infection levels and AIDS cases is sketchy, however, because data are not collected assiduously, testing is sporadic, and test results are closely held for security reasons. ☐



problem in the military is likely to grow. In addition, the policy of rotating brigades in country means the armed forces could spread AIDS to rural areas. 

We expect combat support and technical fields to be severely affected in many African militaries. 



Women. Approximately half of all AIDS/HIV cases in Africa are female. The number of infected mothers is high but still vastly underreported because most women do not attend clinics or get tested when there. Approximately 30 to 40 percent of children born to infected mothers will themselves be infected. (U)

Groups that engage regularly in high-risk behavior, such as prostitutes, have been known to have high rates of infection for several years, and 40-percent

infection rates among prostitutes in Kinshasa and the 60 percent or higher rates in Nairobi are no longer surprising. What is alarming to researchers and officials, however, is the discovery of increasing rates among these groups in countries considered to have low or moderate levels of infection, such as Niamey, Niger, where 7.5 percent of prostitutes were infected in 1988, and 12.5 percent were infected one year later. (U)

Education and Prevention Campaigns

African efforts to tackle AIDS problems soared following the creation in 1987 of the World Health Organization's Global Program on AIDS (WHO/GPA). Before then, only a handful of Sub-Saharan countries were casting about for ways to combat the disease, and fewer still were willing to openly recognize or explain to their citizens the scope of the epidemic or the sexual nature of the disease (see foldout, page 9). Today, with the technical and financial assistance of WHO/GPA and donors, newly created national AIDS committees in most countries have adopted National AIDS Programs to protect the blood supply, stimulate public education activities to urge sexual behavior change, plan for care of the infected and ill, and create surveillance and reporting schemes. WHO/GPA is funded by international donors at \$100 million per year, and in turn funds 10 to 20 percent of the National Program in individual countries, with bilateral and multilateral donors supplying the rest. The 1990 National AIDS Program budget for Africa is projected at \$150.3 million from all sources, some 73 percent of National Program spending in Third World countries. (U)

Although strides have been made in devising anti-AIDS strategies, key decisionmakers often do not share the sense of urgency shown by the medical professionals who direct national programs, and Health Ministries seldom have political power. Lack of participation at the top rungs of government has resulted in faltering projects and slow approval of new activities, and only a few governments have dedicated their own funds as a complement to international AIDS assistance.

Despite a less than wholehearted commitment by political leaders, WHO has documented a move away from official defensiveness and denial and the will, by some governments, to back sensitive projects. For instance, Zaire, which barely acknowledged AIDS problems a few years ago, initiated a mass media campaign in Kinshasa to promote condom use after a 1988 survey showed that only 42 percent of women and 70 percent of men knew condoms were a means of prevention, and only 25 percent had ever used a condom. After the media campaign, the number of condom sales in Kinshasa increased from a negligible level to 1.5 million per month during the first half of 1989. There is little evidence, however, that such changes in knowledge and attitude have as yet resulted in sexual behavior changes on the scale needed to slow the spread of the virus. (U)

The credibility gap between many central governments and major sectors of the population is a major constraint on such educational efforts and leads some groups to reject the prevention message as yet another tactic of those in power to tighten government control. This is especially true of rural people who discount the advice of urban-based officials whom they accuse of delivering only words and not needed basic services such as health care or schools.

Cultural and technical barriers to countrywide AIDS education are formidable. Poor communications facilities mean that the more concentrated and better educated urban populations—often just those in the capital—are reached more often by printed materials and radio and television programs than are farflung, less literate rural populations. Even in small countries where distances between urban and rural populations

are not great, educational outreach faces many obstacles. In the Gambia, where nearly 90 percent are illiterate, a recent survey found that most Gambians knew AIDS was a killer disease, but few knew of any prevention measures. Media design is also a problem. A dearth of African communications experts needed to design posters and presentations often results in the use of foreign consultants who sometimes miss the nuances necessary for cultural acceptance of the message, and the multitude of languages in any one country present translation problems and expense.

Health Infrastructures

AIDS patients have already overwhelmed the grossly inadequate health systems in most highly infected countries, and similar problems are likely in those countries only now beginning to experience an upsurge in AIDS patients. Public health networks across the continent suffer from a lack of funds—per capita health spending averages \$1 to \$10 per year—severe shortages of drugs and equipment, poor facilities, and inadequate training of the too few medical personnel and administrators.³ Hospitals in central and southern Africa are grappling with the leading edge of the epidemic and already losing the resource battle:

- In Lusaka the University Hospital has 30 to 40 percent of its beds occupied with AIDS patients and only 45 doctors—146 are needed.
- Mama Yemo Hospital in Kinshasa, one of the largest in Africa with 2,000 beds and 2,500 outpatients daily, is woefully underfunded, under-equipped, and understaffed. In early 1990, half the patients on internal medicine wards and 10 percent on pediatric wards had AIDS.
- In 1989, 4,600 AIDS patients were treated in the main hospital in Kigali, comprising about one-half of all patients. Special drugs are seldom used; the cost of treatment with AZT—the most effective drug in the West—for one month would equal a top civil servant's entire monthly salary.

The physical strains on health systems will be difficult to overcome, but financial strains may well be insurmountable. To illustrate the added burden engendered by the AIDS epidemic, the World Bank has projected that in Zaire—where average treatment costs for AIDS are roughly \$230 per patient—the national health budget would need to be increased 58 percent by 1993 just to accommodate AIDS patients.

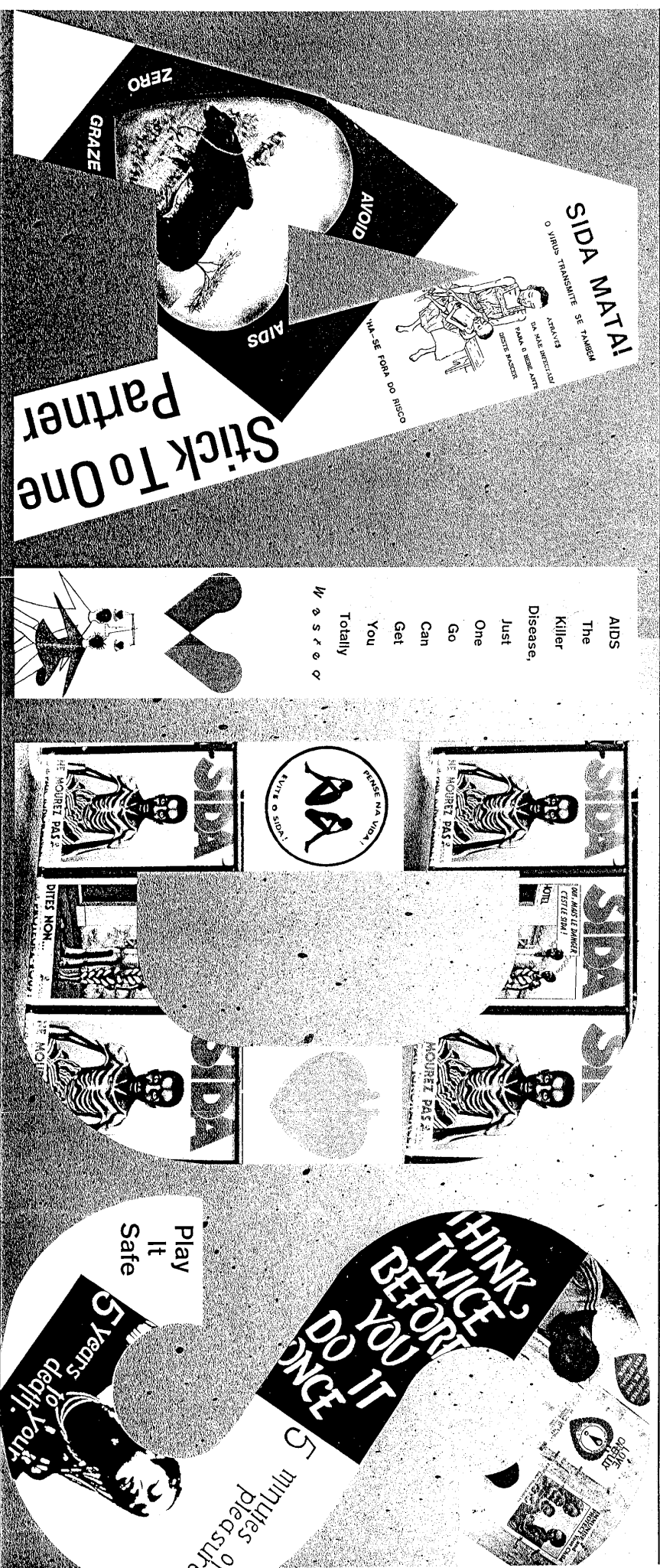
AIDS has been superimposed on Africa's overtaxed health systems. Malaria, measles, diarrhea, respiratory illnesses, schistosomiasis, sexually transmitted diseases (STDs), and malnutrition currently affect more people than AIDS—some 30 percent of Sub-Saharan Africa's total population, according to WHO. These problems receive higher priority from most health professionals because most are preventable or treatable, in contrast to AIDS. (U)

Adding to the grim health picture is the role the HIV virus is playing in outbreaks of tuberculosis, which had been in decline for over two decades. Although infection with tuberculosis is common in Africa—rates of nearly 70 percent occur in some areas—the disease remains latent in most healthy people. When immune systems are compromised by HIV, however, those with latent tuberculosis develop the disease and are then capable of spreading tuberculosis as well as HIV. During a 10-month period, 43 percent of new tuberculosis patients in Abidjan were also HIV infected, as were 17 to 40 percent in Zaire and 55 percent in the Central African Republic. (U)

Cultural Changes

There is no evidence that risk-reducing behavior changes are occurring at levels sufficient to slow the epidemic in Sub-Saharan Africa. Mass media campaigns have succeeded in convincing audiences that AIDS is a fatal disease, but followup surveys find that a combination of traditional behavior patterns, incorrect perception of information, and fatalism have thwarted the adoption of unpopular preventive measures—condom use, prohibition on casual sexual encounters, or abstinence. (U)

Figure 4
Prevention Posters From Selected African Countries



Secret

Research Progress on AIDS in Africa

The West is conducting major research efforts on molecular virology, anti-HIV drug development, and HIV vaccines, while African research is concentrating on documenting the epidemic, describing the natural history of the disease, and studying the social and cultural context of the African epidemic. In many instances, African scientists have collaborated with Western counterparts, most notably in multinational centers such as Project SIDA in Zaire. There have been, however, two exclusively African efforts to develop drugs. Egyptian and Zairian doctors developed the drug MM-1 and in 1987 announced it as a cure, although by 1989 they said its benefits had been overstated. The ingredients of MM-1, and of the follow-on version MM-2, have never been revealed nor made available to other scientists for controlled testing and evaluation. On the other hand, the drug KEMRON, developed by Kenyan researchers, is undergoing evaluation tests sponsored by WHO. (U)

Available drug therapies only temporarily slow the progression to AIDS. Each eventually loses effectiveness, and none is curative. The drugs have

proved too costly for use in African medical settings. Success in vaccine development remains uncertain and any practical results are at least 10 years into the future. Nevertheless, in anticipation that ultimately both drugs and vaccines of sufficient promise to justify testing in humans will be found, WHO and governmental agencies have done advance planning as to where such testing can be done most efficiently. Medically, tests of African populations with their very high rates of new infections could provide clear answers years earlier than tests of Western populations with much lower rates of infections. No matter how well justified scientifically or carried out with informed consent of governments and participants under WHO protocols, however, such testing could be viewed by some Africans as exploitation of impoverished blacks for the benefit of wealthy whites. Even after a vaccine that prevents infection is developed and used, there would be 10 to 15 years of wind down while the disease ran its course in those already infected. (U)

Typical of most countries, interviews of civilian and military personnel in Congo showed that the majority of people knew AIDS was fatal and that it was transmitted sexually and through blood products but still characterized multipartner sexual liaisons as acceptable demonstrations of male virility; they said condoms were too expensive, culturally undesirable, and rarely used. Even in hard-hit Uganda, President Museveni condemns condom use for AIDS prevention as leading to moral degeneracy and prohibits distribution, calling instead for a return to traditional monogamous marriage. Moreover, in most countries, women who insist on condom use are often accused by husbands and family of ignoring traditional values in an effort to limit fertility and are at added risk of beatings, divorce, or expulsion from the extended

family. Finally, the status of motherhood far outweighs the risk of HIV infection, and women typically assess the risk of bearing infected children who will soon die as no greater than the risk of infant death from one of a myriad of childhood diseases. ☐

Unable to care for the burgeoning caseload of patients, authorities rely on the extended family to take over the burden. Many families accept the financial and psychological obligation, but others expel the sick from family and village because of economic hardship and the fear and prejudice that surrounds the disease. (U)

A study of the area around Rakai in Uganda of a newly recognized outcome of the epidemic—thousands of orphans—illustrates the breakdown of traditional coping mechanisms. The area is nearly bereft of young men and women, and about half of those who remain are infected. Some 24,500 children are orphaned in the town of Rakai and 13,800 in nearby Hoima. Nearly half of the surviving caretakers are either too young or too old to provide both child care and farm labor, resulting in a food shortage in a once fertile area. On the basis of data from Rakai and the estimated rapid spread of AIDS throughout the country, researchers estimate that Uganda will be grappling with the needs of 600,000 to more than 1 million AIDS-related orphans in coming years. Problems of near this magnitude can be expected in neighboring Tanzania as well as Burundi, Malawi, Rwanda, Zambia, and Zimbabwe. []

With little help coming from modern medicine, many Africans turn to traditional healers. While some healers do little more than squeeze money from the poor and credulous, others are seriously confronting the disease. The leaders of the 200,000-strong Pan-African Traditional Healers' Association recently consulted with Western medical practitioners and then issued guidelines for AIDS protection. They directed members to urge Africans to follow traditional sexual behavior, identified as abstinence before marriage and a monogamous marriage relationship, and included permission for condom use. Many AIDS experts believe that more interaction between traditional healers and AIDS educators could help in control efforts. (U)

To help fill the gap left by overburdened health services and traditional structures, community based self-help and support groups are springing up in many countries, although they so far reach only a minuscule portion of those in need, are grossly underfunded, and occasionally meet strong local opposition. International organizations are beginning to lend their expertise to these struggling groups, but few local or national governments have as yet offered assistance to such private-sector initiatives. (U)

Outlook for the 1990s

Social, economic, and political repercussions from a soaring AIDS epidemic will confront all Sub-Saharan African governments and populations before the middle of the decade. The upward spiral of AIDS cases and deaths are but the leading edge of the disaster—soon to follow will be hundreds of thousands more victims, most already on the brink of death. As grim as the situation is, the epidemic is probably understated by available data because of the lack of expertise and resources to conduct systematic evaluations. We believe that improvements in data collection will reveal a crisis of even greater magnitude than is now appreciated by most African leaders. []

The impact of the epidemic in populous West Africa is beginning to be felt. Most governments ideally are in a better position to stem the rapid spread of infection than were countries hit several years ago as the disease is better understood and WHO's prevention strategies are already defined. Nevertheless, West Africa's leaders lack a sense of urgency, and the pattern of lackluster response seen in other regions is likely to be repeated. Thus, the number of carriers and victims in West Africa's large population and teeming cities could become enormous. []

Urban youth, military personnel, and the more affluent classes have shown little inclination to change the high-risk sexual behavior that fuels the epidemic. Such elite groups are as culturally opposed to strict monogamy or condom use as are powerless and less well-educated citizens. As the epidemic spreads, however, and depletion of their numbers increases, the elite are likely to insist on government attention to their personal and class crises. []

Although we have not yet observed important political effects of AIDS in Africa, we believe they will be evident in the hardest hit countries by the mid-1990s:

- *Increasing instability.* A worsening AIDS crisis will add yet another burden on already fragile governments struggling with intractable problems such as

debt, economic stagnation, population growth, environmental degradation, and sharpening conflicts over a range of domestic issues stimulated by greater pluralist expression.

- *Scapegoating.* Under pressure to do more on AIDS despite scarce resources, African leaders are likely to search for scapegoats. This may lead to repressive or discriminatory policies toward unpopular ethnic or regional groups, or AIDS victims themselves, and fuel anti-Western sentiment.
- *Manpower losses.* Death rates among political leaders will probably reach levels that begin to impair capabilities to govern. In addition to sheer loss of trained manpower, rulers and civil servants may come to share a growing fatalism within their societies about AIDS that overwhelmingly favors short-term goals and satisfactions over long-term solutions.

The effects of AIDS on African militaries and internal security forces in the next few years will have important security implications. Although we have not yet observed degradation of military capabilities from AIDS, serious problems will impair readiness and effectiveness in the future:

- Reduced performance and loss of trained manpower, experienced officers, and technicians.
- Restrictions on military students going abroad for training; foreign military advisers in country; and training and exercises with foreign forces.
- Aggravation of morale and discipline problems.
- Strains on military medical systems.
- Poor civil-military relations if the armed forces are perceived by the populace as contributing to the spread of AIDS.

The growing epidemic could also lead to heightened tensions within and between African states. If infection levels are high or AIDS cases numerous in a particular area, travel restrictions that might be imposed could result in tense political relations, diplo-

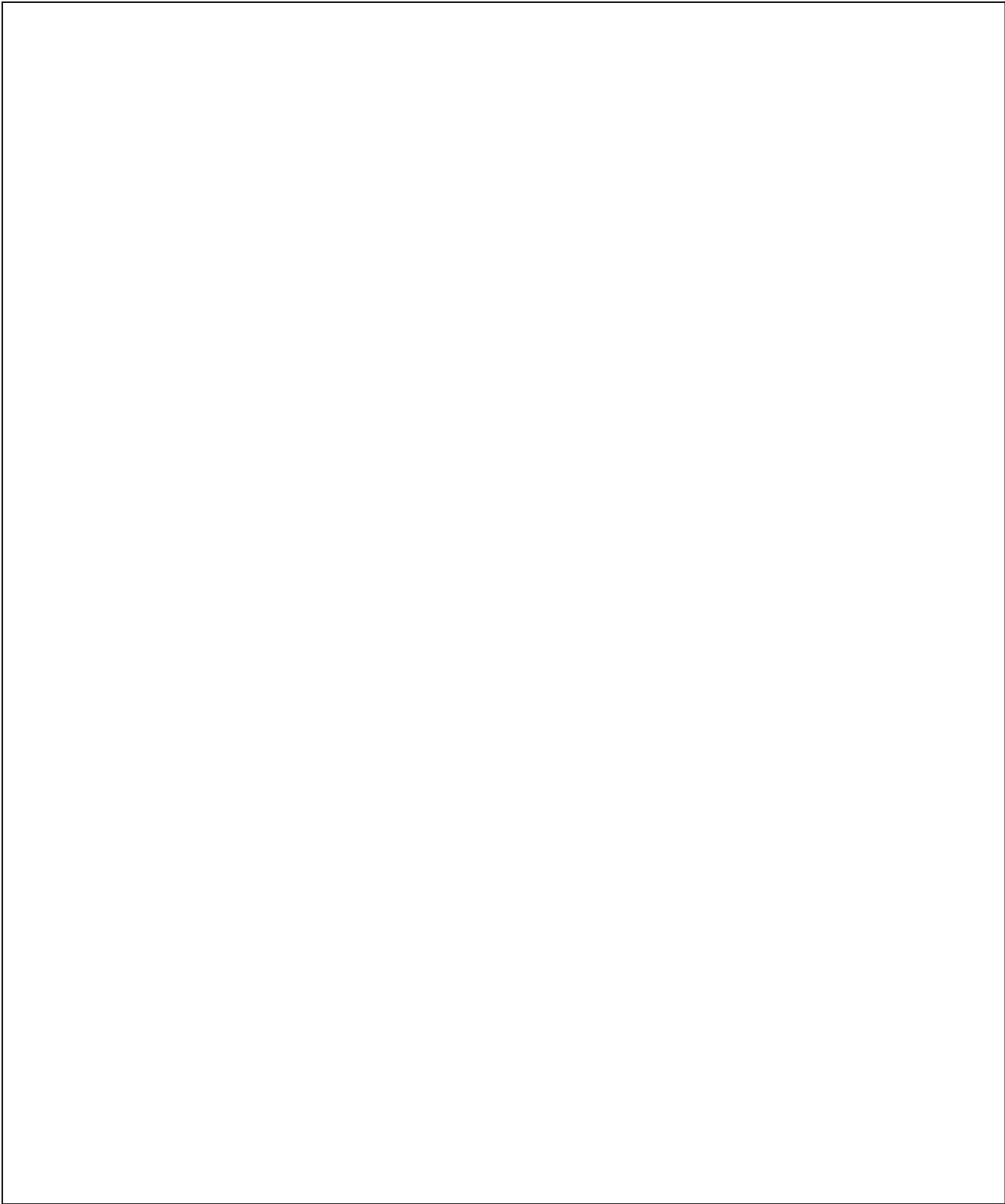
matic isolation, the disruption of key trade and commercial links, border closings, and expulsion of foreigners.

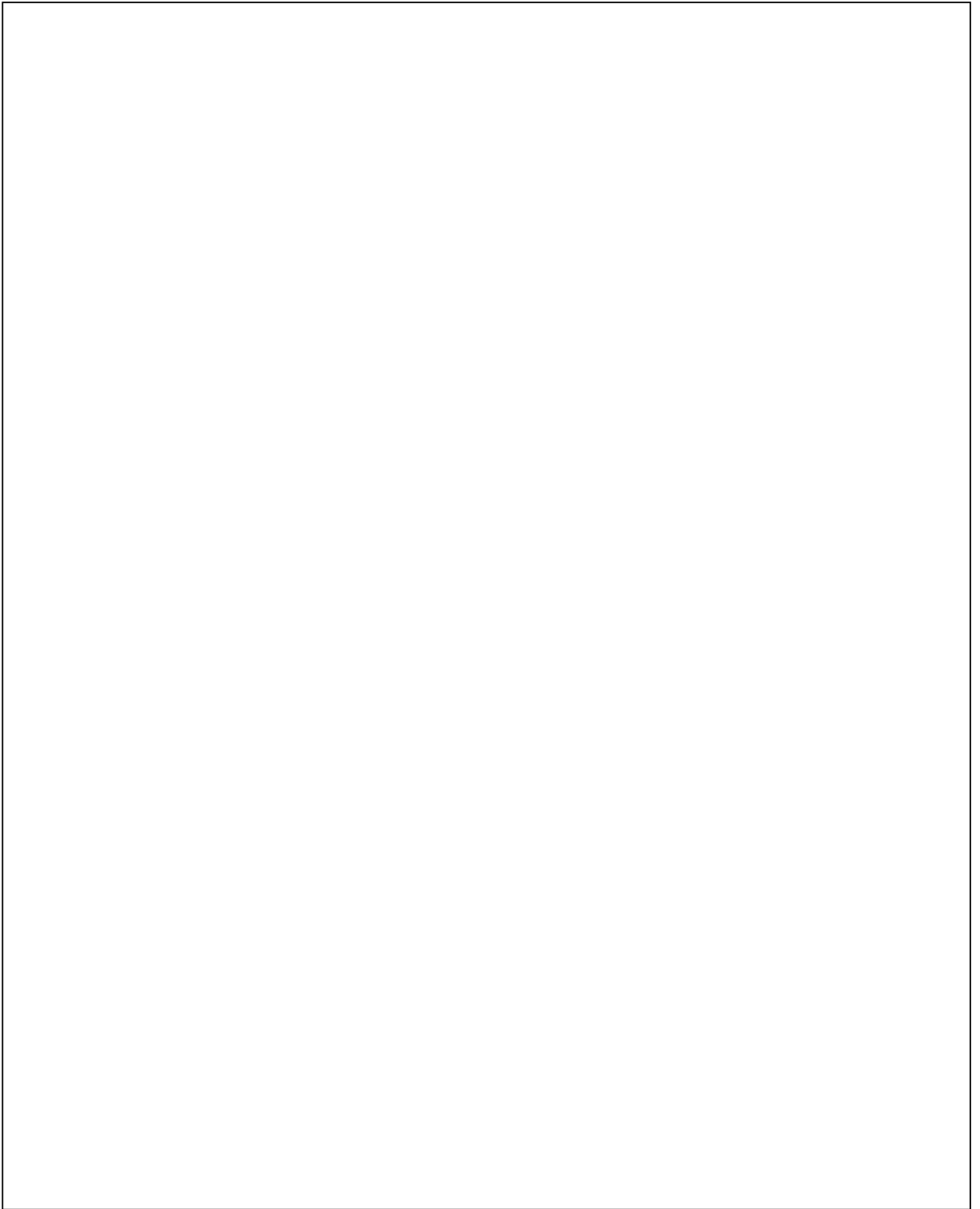
It is not yet possible to document an AIDS-induced economic decline, but analysis of populations most affected by the disease—15- to 50-year-old urban dwellers—strongly implies that the economic and political elites, and the youths who are training to enter their ranks, are likely to fall victim to the disease in large numbers. The possible loss of a significant portion of the already small cadre of skilled workers and professionals could result in declining productivity and less capable management within five or six years. Replacements will, of necessity, be less well trained and experienced, which could further aggravate economic difficulties.

High prevalence of other endemic diseases, and an limitless demand for AIDS care and control programs will overwhelm already weak health systems. The overall quality of health care is poor and has declined under the hard economic conditions of the 1980s. Governments are unlikely to recover the ground lost and will falter badly as AIDS cases skyrocket. The cost of upgrading health systems will probably be prohibitive for governments as well as for foreign donors who foot much of the bill even now. As a result, AIDS patients will remain untreated and the myriad of other diseases could gain new strength.

No African population is likely to stop growing altogether, although in some countries growth will slow by the end of the decade as rates decline by a percentage point or more. The populations of cities and heavily infected rural provinces, however, could well experience outright declines. (U)

Slowed population growth will not ease social or economic problems in the short term. The highest disease rates and greatest number of deaths are already occurring in the productive, economically active 15 to 50 age group, with maximum rates in the group 20- to 30-years-old. The result of losses in this group could be fewer teachers for even reduced





student numbers; surviving health professionals overwhelmed by increased patient loads; or a slowing of business activity and a further reduction of economic resources. []

The costs of shoring up institutions to meet the health crises will deplete the already shrinking pool of resources, goods, and money for economic and social development. As competing needs are sorted out, political stability could be threatened if those parts of society that lose in the resource struggle become disaffected enough to become the locus of serious political dissent. []

External Involvement

The USSR, Eastern Europe, and Cuba

The initial flurry of anger and resentment shown by African countries over the testing and deportation of infected African students from the USSR, East European countries, and Cuba has died down and resulted in only negligible political fallout; similar policies in Western countries are also not contentious. New student groups are arriving in Cuba on schedule, and any reductions in African training slots in the USSR or East European countries will have more to do with political changes in those countries than with the AIDS epidemic in Africa. The Soviets, besieged with domestic problems and a rise in its own epidemic, have recently begun to seek cooperative research efforts with the United States, but have so far made no dramatic overtures to aid Africa's anti-AIDS campaigns. East European countries are also struggling with changed domestic situations and newly recognized epidemics in some, such as in Romania, and are unlikely in the near term to be significant players in Africa's AIDS struggle. []

Cuba continues its decades-long policy of using medical assistance to maintain involvement in Africa. But we expect Cuba to be only a minor actor in the AIDS struggle. Although countries eagerly accept Cuban medical experts, Cuba's stringent policy of lifelong quarantine for its infected population has not been copied in Africa. []

The United States and the West

Growing international concern with the epidemic may complicate Western ties to Africa. Western countries will continue to consider ways of limiting the exposure

Soviet Disinformation Campaign

Over the past two years, Moscow has backed away from its allegations in the Soviet and international media that the United States is responsible for inventing and spreading AIDS. Since the end of 1987, there have been only about a half dozen replays of AIDS disinformation in the Soviet press. US protests and exposure of Soviet involvement seem to have convinced the Soviets that such operations may harm their new, more cooperative international image. In an October 1987 news conference, representatives of the Soviet Academy of Sciences discredited the AIDS stories, stating that "no serious scientists" believed the allegations. Furthermore, when a Radio Moscow broadcast in early March 1988 claimed that AIDS was manufactured in the United States and Western Europe, Moscow—following a strong US protest—stated the official Soviet position that AIDS was not manmade. Radio Moscow officials blamed the broadcasts on a "low-level nut" and bureaucratic inertia. []

The AIDS disinformation campaign was always strongest in Africa, where Soviet placements found a ready audience. Over the past two years, replays of AIDS stories have steadily declined in Africa and elsewhere, and, although they will continue to receive some attention in Third World media for many years to come, we believe that Moscow will refrain from providing any new stories or replaying old ones. []

of their military personnel to the disease without offending host governments. US and Western business interests could curtail or suspend operations in fear of health risks to their personnel or because of highly infected indigenous labor forces and further depress African economies. Pushed to respond to an increasingly difficult domestic situation and a perceived loss of prestige internationally, African leaders

may in frustration lash out at the United States and the West, even though the major hope for a cure or a vaccine appears to lie with Western research.

The cooperative relationships forged between the West and Africa over the past three to four years to combat the disease may begin to falter. The value of internationally assisted prevention programs, bilateral aid for condom distribution and technical training, and cooperative research efforts may come to seem insignificant in the eyes of Africans as the rising toll of illness and death engenders a sense of isolation and panic. Africans will expect the United States and the West to underwrite broader and more costly assistance programs to cope with the disease. However, the massive assistance needed to raise health care programs to even minimum standards are probably out of the question in days of stretched assistance budgets. African disappointment may result in bitter criticisms and charges of racism. Moreover, the ethical questions raised by any drug or vaccine testing on African populations by Western researchers may also strain relations.

Annex

Country Profiles

The profiles give an overview of AIDS cases, HIV infections, and information on the institutional response of Sub-Saharan countries to the epidemic. (U)

AIDS cases reported to WHO are the cumulative cases most recently reported by the countries to the World Health Organization (WHO) and entered March 1990 in WHO's monthly compilation of cases worldwide. These numbers grossly underrepresent actual AIDS cases in Africa because of rudimentary health systems and their inaccessibility to the majority of people, the inadequacy of health surveillance and reporting systems, and political sensitivities about the intensity of the epidemic. (U)

HIV prevalence is estimated from the results of the testing of blood samples from selected population groups such as blood donors and those considered at high risk of HIV infection. The reliability of these screenings as the basis for estimating infection rates for similar larger populations or countrywide is limited; the size of the tested population is usually small or nonrepresentative of larger populations, testing procedures are sometimes medically inadequate, and analysis and recordkeeping is often methodologically flawed and incomplete. Test results cited here are *illustrative* of the accumulating body of HIV infection data, but they are not a definitive compilation of screening results. (U)

AIDS program components within the Plans promoted by the World Health Organization/Global Program on AIDS (WHO/GPA) include education and information campaigns, protection of the blood supply, and care for the infected and ill. Nearly all Sub-Saharan countries developed a Short-Term Plan (STP) that institutionalized AIDS activities—organized National AIDS Committees, identified health, communications, and research resources—and then advanced to a Medium-Term Plan (MTP) strategy for

multiyear prevention and care programs. Bilateral and multilateral donors and the WHO/GPA provide the bulk of funding. There are also AIDS activities outside the WHO/GPA umbrella, such as bilateral technical and commodity assistance, national and international medical and behavioral research, and counseling and education initiated by private voluntary organizations. (U)

Health budget gives the amounts allocated to general health care by the country—rarely are country funds added to the WHO/GPA and donor AIDS projects. Budget figures are often unreliable as a gauge of health care spending; actual expenditures or monies misdirected or wasted are unknown; and projects funded outside of Health Ministries such as military medical care for civilians are not included, nor are foreign donor projects that often comprise a substantial share of delivered health care. Health care as a percentage of the national budget and per capita spending are also suspect but are provided as indicators of the government's priorities and its ability to deliver health services. (U)

Angola

AIDS cases reported to WHO: 104 (1.22 per hundred thousand population) as of December 1988. (U)

AIDS program: MTP adopted. (U)

Benin

AIDS cases reported to WHO: 60 (1.29 per hundred thousand population) as of September 1989. (U)

HIV prevalence: no data available. (U)

AIDS program: MTP adopted in June 1989

(Page is blank)

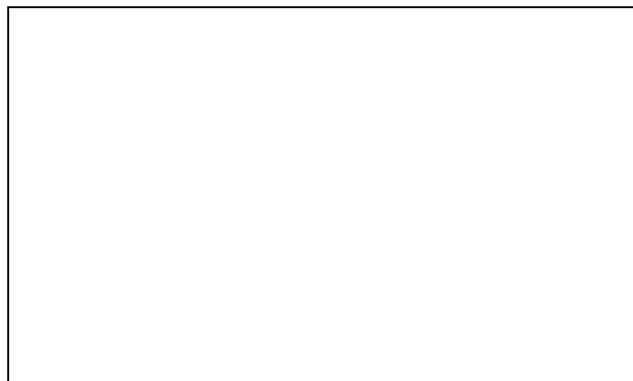


Botswana

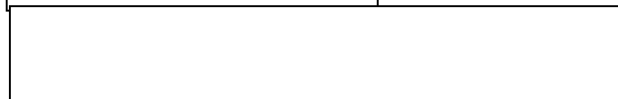
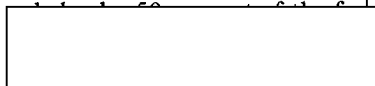
AIDS cases reported to WHO: 87 (7.06 per hundred thousand population) as of January 1990. (u)

Burundi

AIDS cases reported to WHO: 2,355 (43.16 per hundred thousand population) as of June 1989. (u)



AIDS program: MTP adopted,



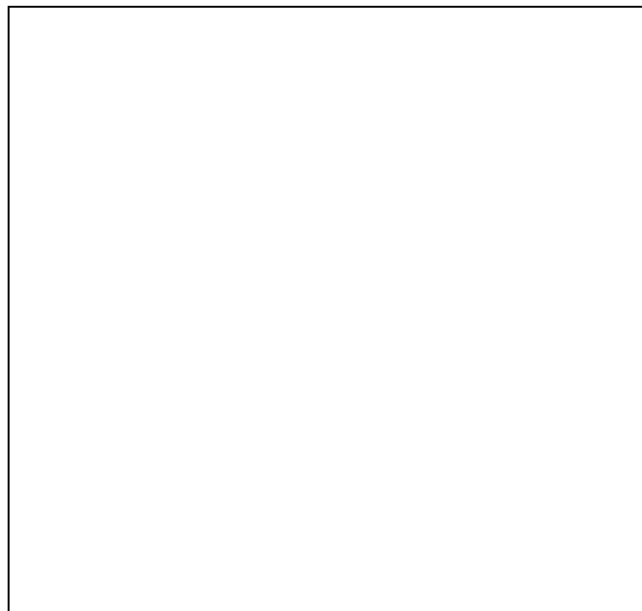
AIDS program: MTP adopted. (u)

Burkina Faso

AIDS cases reported to WHO: 555 (6.37 per hundred thousand population) as of March 1989. (u)

Cameroon

AIDS cases reported to WHO: 78 (0.72 per hundred thousand population) as of March 1989. (u)



AIDS program: MTP adopted in 1988. (u)

Cape Verde

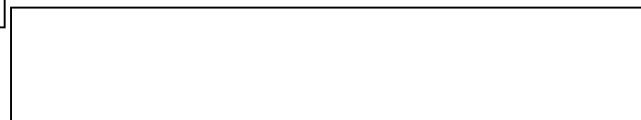
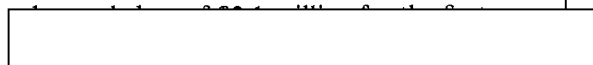
AIDS cases reported to WHO: 28 (7.69 per hundred thousand population) as of December 1989. (u)

AIDS program: STP adopted. (u)

Central African Republic

AIDS cases reported to WHO: 662 (23.59 per hundred thousand population) as of December 1988. (u)

AIDS program: MTP adopted in October 1989,



[Redacted]

AIDS program: MTP adopted. (U)

[Redacted]

Djibouti

AIDS cases reported to WHO: seven (2.13 per hundred thousand population) as of February 1990. (U)

AIDS program: MTP adopted in July 1988

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Chad

AIDS cases reported to WHO: 21 (0.42 per hundred thousand population) as of November 1989. (U)

AIDS program: STP completed; work ongoing for MTP. (U)

[Redacted]

AIDS program: MTP adopted in November

[Redacted]

[Redacted]

Comoros

AIDS cases reported to WHO: one (0.22 per hundred thousand population) as of January 1990. (U)

Equatorial Guinea

AIDS cases reported to WHO: three (0.85 per hundred thousand population) as of June 1989. (U)

AIDS program: STP adopted. (U)

[Redacted]

AIDS program: STP adopted. (U)

Congo

AIDS cases reported to WHO: 1,250 (56.11 per hundred thousand population) as of December 1987. (U)

Ethiopia

AIDS cases reported to WHO: 320 (0.64 per hundred thousand population) as of February 1990. (U)

[Redacted]

[Redacted]

[Redacted]

AIDS program: MTP adopted. (U)

[Redacted]

Gabon

AIDS cases reported to WHO: 51 (4.81 per hundred thousand population) as of January 1990. (U)

[Redacted]

AIDS program: MTP being formulated. (U)

[Redacted]

The Gambia

AIDS cases reported to WHO: 66 (8.26 per hundred thousand population) as of August 1989. (U)

[Redacted]

AIDS program: MTP adopted in August 1989; [Redacted]

[Redacted]

Ghana

AIDS cases reported to WHO: 1,077 (7.28 per hundred thousand population) as of October 1987. (U)

[Redacted]

AIDS program: MTP adopted September 1989. [Redacted]

[Redacted]

Guinea

AIDS cases reported to WHO: 82 (1.16 per hundred thousand population) as of October 1989. (U)

[Redacted]

Guinea-Bissau

AIDS cases reported to WHO: 76 (7.8 per hundred thousand population) as of May 1989. (U)

[Redacted]

[Redacted]

AIDS program: MTP adopted in mid-1989 [Redacted]

[Redacted]

Ivory Coast

AIDS cases reported to WHO: 3,647 (31.39 per hundred thousand population) as of February 1990. (u)

AIDS program: MTP developed for 1988-95 program. (u)

Kenya

AIDS cases reported to WHO: 6,004 (24.66 per hundred thousand population) as of June 1989. (u)

AIDS program: MTP adopted, funding pledges for September 1989 through December 1990

Lesotho

AIDS cases reported to WHO: eight (0.47 per hundred thousand population) as of September 1989. (u)

AIDS program: MTP adopted

Liberia

AIDS cases reported to WHO: two (0.08 per hundred thousand population) as of March 1988. (u)

AIDS program: MTP adopted in September 1989. (u)

Madagascar

AIDS cases reported to WHO: none as of February 1989. (u)

AIDS program: MTP for 1990

Malawi

AIDS cases reported to WHO: 2,586 (29.6 per hundred thousand population) as of June 1988. (U)

AIDS program: MTP adopted June 1989

Mozambique

AIDS cases reported to WHO: 64 (0.45 per hundred thousand population) as of January 1990. (U)

AIDS program: MTP adopted April 1988

Mali

AIDS cases reported to WHO: 178 (two per hundred thousand population) as of October 1989. (U)

AIDS program: MTP adopted in November 1989,

Namibia

AIDS cases reported to WHO: Namibia gained the right to membership in WHO after its independence in March 1990 but has not yet officially reported cases. The Department of Health and Welfare Services confirmed 224 cumulative cases by April 1990. (U)

Niger

AIDS cases reported to WHO: 80 (1.07 per hundred thousand population) as of December 1989. (U)

AIDS program: MTP adopted in January 1990

Mauritania

AIDS cases reported to WHO: none as of July 1988. (U)

AIDS program: MTP formulated. (U)

Mauritius

AIDS cases reported to WHO: four (0.36 per hundred thousand population) as of December 1989. (U)

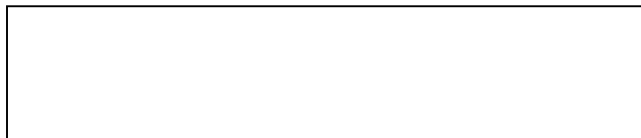
AIDS program: MTP adopted. (U)

Nigeria

AIDS cases reported to WHO: 35 (0.03 per hundred thousand population) as of August 1989. (U)



AIDS program: MTP is nearing completion. (u)



Rwanda

AIDS cases reported to WHO: 2,285 (31.21 per hundred thousand population) as of December 1989. (u)

AIDS program: MTP adopted. (u)

Sao Tome and Principe

AIDS cases reported to WHO: two (1.65 per hundred thousand population) as of April 1989. (u)

AIDS program: STP adopted. (u)

Senegal

AIDS cases reported to WHO: 307 (4.09 per hundred thousand population) as of March 1990. (u)

AIDS program: MTP adopted. (u)




Seychelles

AIDS cases reported to WHO: none as of January 1990. (u)

AIDS program: MTP adopted. (u)

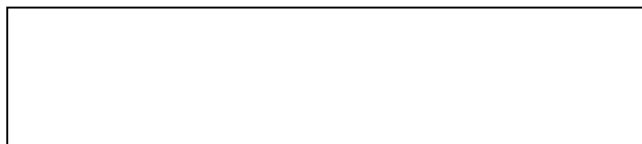
Sierra Leone

AIDS cases reported to WHO: 21 (0.52 per hundred thousand population) as of June 1989. (u)

AIDS program: STP in effect, but the MTP, although formulated, has not been officially adopted. 

Somalia

AIDS cases reported to WHO: 15 (0.18 per hundred thousand population) as of February 1990. (u)

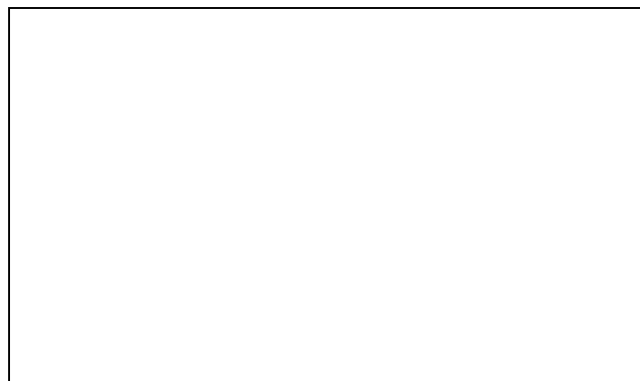



AIDS program: STP adopted. (u)





South Africa

AIDS cases reported to WHO: 353 (0.92 per hundred thousand population) as of February 1990. (u)



AIDS program: the South African Government 

 It does not participate in WHO/GPA programs, as of June 1990. 

Sudan

AIDS cases reported to WHO: 188 (0.77 per hundred thousand population) as of February 1990. (u)



Uganda

AIDS cases reported to WHO: 7,375 (43.36 per hundred thousand population) as of April 1989. (u)

AIDS program: 1988 STP extended to 1989/90 with donor funding; MTP formulated and being amended. (u)

Swaziland

AIDS cases reported to WHO: 14 (1.85 per hundred thousand population) as of June 1988. (u)

AIDS program: MTP adopted. (u)

Tanzania

AIDS cases reported to WHO: 5,627 (22.32 per hundred thousand population) as of December 1989. (u)

AIDS program: MTP adopted. (u)

Togo

AIDS cases reported to WHO: 56 (1.62 per hundred thousand population) as of December 1989. (u)

Zaire

AIDS cases reported to WHO: 11,732 (34.22 per hundred thousand population) as of January 1990. (u)

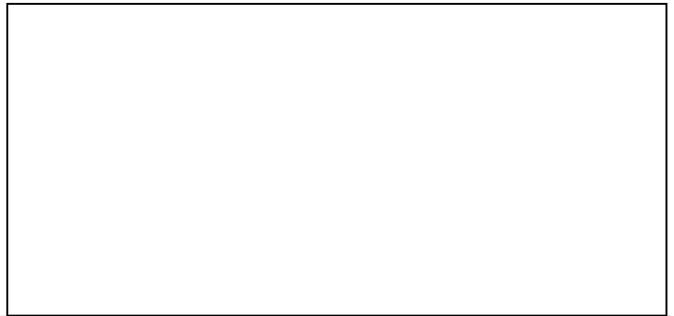
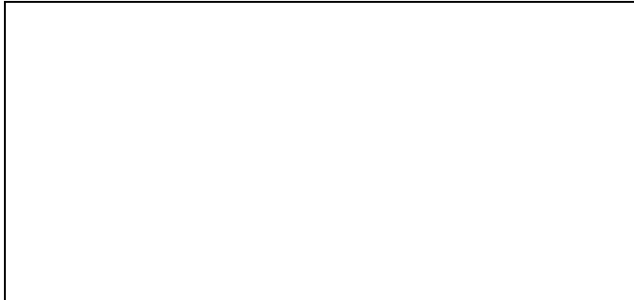
AIDS program: MTP was adopted in January 1990

AIDS program: MTP adopted. (u)

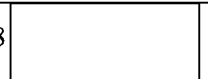
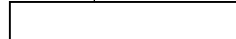


Zambia

AIDS cases reported to WHO: 2,709 (34.4 per hundred thousand population) as of January 1990. (u)



AIDS program: MTP adopted in 1988



AIDS program: MTP adopted. (u)

Zimbabwe

AIDS cases reported to WHO: 1,632 (16.13 per hundred thousand population) as of February 1990. (u)